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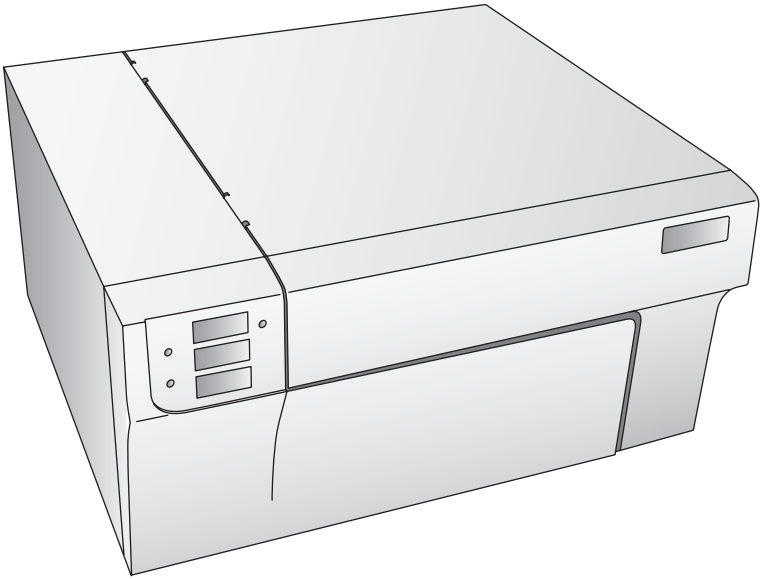

LX 810
COLOR LABEL PRINTER

User's Manual

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Printing History
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FCC Compliance Statement: This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

For Users in the United States: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Re-orient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of a shielded cable is required to comply with the Class B limits of Part 15 of the FCC Rules. You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate and/or obtain warranty service for this equipment. Within the U.S., this product is intended to be supplied by a UL Listed Direct Plug-in Power Unit marked Class 2 and rated 30 Vdc, 830 mA or 1.0A.

For Users in Canada: This digital apparatus does not exceed the Class B limits for radio noise for digital apparatus set out on the Radio Interference Regulations of the Canadian Department of Communications. Le present appareil numerique n'emet pas de bruits radioelectriques depassant les limites applicables aux appareils numeriques de la class B prescrites dans le Reglement sur le brouillage radioelectrique edicte par le ministere des Communications du Canada.

CAUTION!

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE. TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE EXTERIOR PANELS. NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL. OPERATE THE UNIT WITH ONLY THE PROPER ELECTRICAL SPECIFICATIONS AS LABELED ON THE PRINTER AND AC ADAPTER

WARNING.
Hazardous moving parts. Keep fingers and other body parts away from the paper-feed gears.

WARNING.
Sharp Edges. Keep fingers and other body parts away from the tear-off bar.

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Interactive Feature in this PDF Document

There are interactive features that will allow you to jump to different locations within the document. Each listing in the Table of Contents is interactive. Place the cursor on either the words or the page number. A small hand with a pointing finger icon appears. Click on the line with the icon and the document will jump to that page. If you want to return to the Table of Contents, move the icon to the top of the page and click on the arrow marked TOC. Navigating through the Index is similar. Place the icon on one of the listings or page numbers, click on it, and it will move to that page. The text relating to the Index listing will appear in red. Returning to the Index can be done by clicking on the arrow marked Index.

Section 1: Getting Started

THANK YOU...

...for choosing an LX810 Color Label Printer. This printer is the perfect way for you to create customized, full color labels quickly, easily, and with a touch of class. The LX810 Printer will print razor-sharp text and barcodes, vibrant colors, and even stunning photo-realistic photographs directly onto rolls of labels and card stocks. Operation is simple, quality is high, and printed images are durable and highly smudge-resistant.

To begin using the printer, please refer to the remainder of this manual. This User's Manual is your complete step-by-step guide to quickly and easily setting up and printing with your new Color Label Printer!

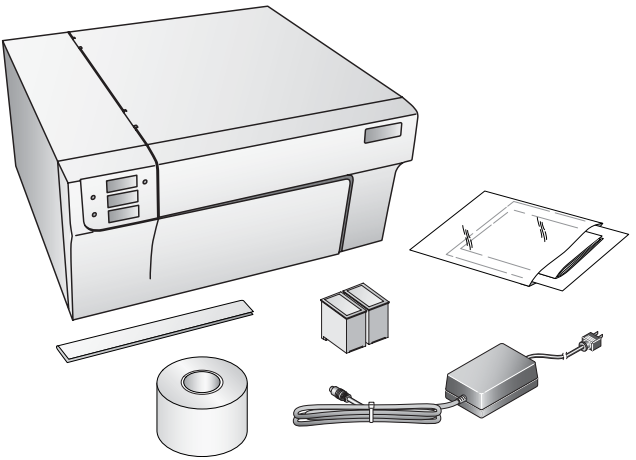
A. CHOOSING A GOOD LOCATION

- Place the printer on a flat surface in a location with adequate air circulation to prevent internal heat build up.
- Do not place the printer near heat sources such as radiators or air ducts, or in a place subject to direct sun light, excessive dust, mechanical vibration or shock.
- Allow for adequate clearance in front of the printer to accommodate the printed label stock as it is leaving the printer to avoid the possibility of binding or jamming of the label stock. Automated re-winders are recommended for larger production jobs.
- Allow for adequate overhead clearance for opening the top cover to allow easy access to the label stock and ink cartridges.

B. UNPACKING AND INSPECTION

While unpacking your printer, inspect the carton to ensure that no damage has occurred during shipping. Make sure that all supplied accessories are included with your unit. The following items should be included:

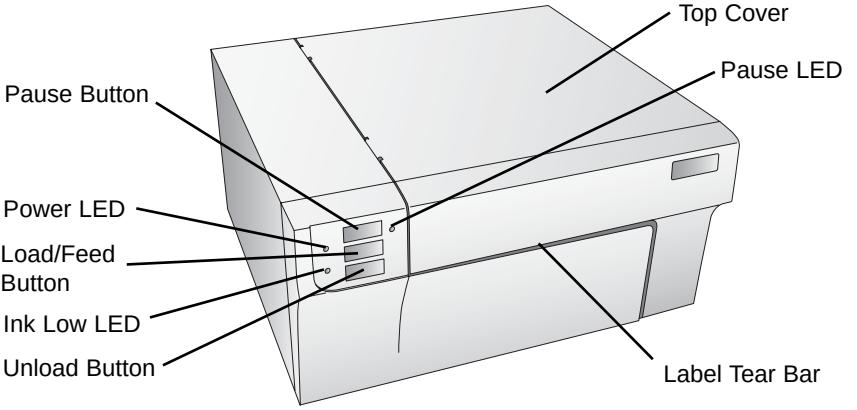
- Printer
- Power Adapter
- Separate Power Cord
- Software Installer CD
- Color Ink Cartridge
- Dye-Based Black Ink Cartridge
- Starter roll of label stock 6" x 4" High-Gloss
- Tear Bar Guard (This is a white plastic shield attached to the Tear Bar for shipping and can be simply pulled from the tear bar to reveal the serrated edge. This guard is recommended for use when using pre-perforated label material.)
- Warranty Statement and Registration Card
- This manual and other printed information



Save the carton and packing materials. They will come in handy when transporting the printer.

C. IDENTIFYING THE PARTS

This illustration shows the front of the printer with its control buttons and LED indicator lights.



The **Pause Button** pauses the printer AFTER the printing of the current label has finished to allow for loading of label stock and ink cartridges.

The **Pause LED** is lit when the printer is paused. Press the **Pause Button** to resume printing.

The **Power LED** indicates that the printer is on and ready to receive print jobs.

The **Load/Feed Button** is pressed in order to load label stock or form feed the label stock through the printer.

The **Ink Low LED** will illuminate when a cartridge has 10% or less of its ink remaining.

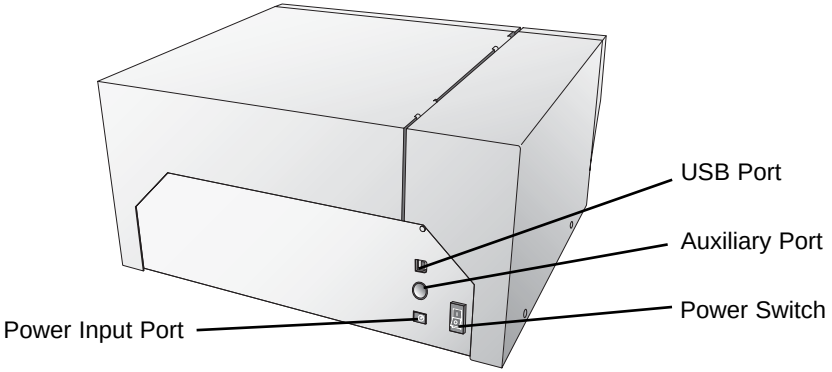
The **Unload Button** will unload the installed label stock by reversing it through the printer. Make sure to tear off the printed labels before pressing the Unload Button.

NOTE: *Always use this procedure to unload label material. DO NOT ALLOW THE END OF THE ROLL TO FEED THROUGH THE MACHINE!*

The **Label Tear Bar** is a serrated edge for conveniently tearing your finished labels from the printer.

WARNING. *Sharp Edges. Keep fingers and other body parts away from the tear-off bar.*

This illustration shows the input ports and power switch found on the rear panel of the printer.



D. MINIMUM PC SPECIFICATIONS

For optimal printing speed you must have a PC with the following minimum specifications:

- Pentium IV Processor
- 512 MB of RAM
- 5 GB of Free Hard Drive Space

E. MINIMUM MAC SPECIFICATIONS

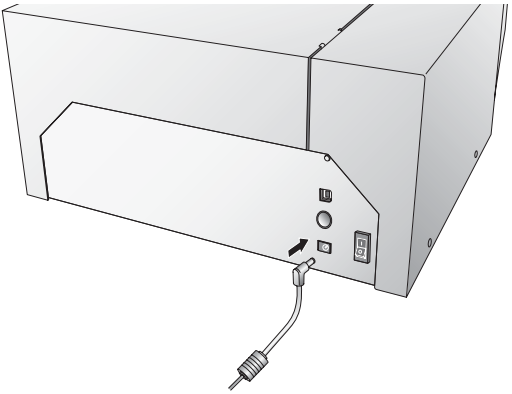
Before getting started, it is important for you to verify that your computer meets the recommended system requirements. Here's what you need in order to successfully print:

- G4 PowerPC 700MHz or higher running OS X version 10.2 or higher
- 256MB RAM
- Free hard drive space of at least 5 GB
- Available USB Port
- Do not connect the printer to any USB hubs or the USB port on your keyboard. It should be connected directly to an onboard USB port.

If your computer does not have at least these minimum system requirements, system performance may not be acceptable.

F. APPLYING POWER

1. Locate the power adapter supplied with your printer.
2. Place one end of the adapter cord into the power port on the rear panel of the printer.
3. Plug the power cord of the adapter into an available wall outlet or surge protecting power strip.



Once the power cord is connected, the printer can be switched on and off using the power switch.

G. INSTALLING THE DRIVER AND SOFTWARE

The Color Label Printer is designed to be used with nearly any IBM-PC® or compatible running Windows 2000/XP/Vista or a Macintosh running OS 10.2 or higher. The printer is equipped with a USB 1.0/2.0 port. This port is the means through which it receives data from your computer. To connect the printer to your computer, use the included shielded USB cable. The software installs as follows:

PC Installation

1. Insert the Installation CD into your computer. In a few moments the installer program should launch automatically. If not, perform the following steps:
   a. Double click **My Computer Icon**, then double click the icon of the appropriate CD drive containing the software installer disc.
   b. Double click **INSTALL.exe** then click the **Quick Start Install Button**.
2. Follow the on screen instructions to install the software. These steps are illustrated below:
   a. Apply power

b. Plug in USB Cable

i. After a few moments Windows will detect the printer and attempt to install the printer driver. You will be prompted with a dialog box like the one shown here:

Hardware Installation
The software you are installing for this hardware:
Printers
has not passed Windows Logo testing to verify its compatibility with Windows XP. (Tell me why this testing is important.)
Continuing your installation of this software may impair or destabilize the correct operation of your system either immediately or in the future. Microsoft strongly recommends that you stop this installation now and contact the hardware vendor for software that has passed Windows Logo testing.
Continue Anyway
STOP Installation

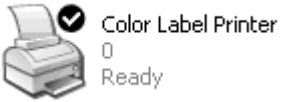
Windows XP Message

Windows Security
Windows can't verify the publisher of this driver software
Don't install this driver software
You should check your manufacturer's website for updated driver software for your device.
Install this driver software anyway
Only install driver software obtained from your manufacturer's website or disc. Unsigned software from other sources may harm your computer or steal information.
See details

Windows Vista Message

Click "**Continue Anyway**" or "**Install Anyway**."

ii. Once installed the "Color Label Printer" icon will appear in the printers folder.

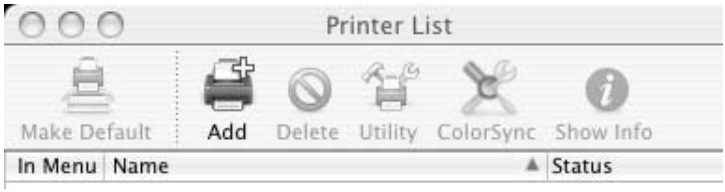


3. Once the printer driver is properly installed, the installer application will prompt you to install label stock and the ink cartridges. You will also be asked to complete a cartridge calibration procedure. Follow the on screen instructions to complete this install. More information on installing the label stock and ink cartridges is available in Section 2 of this manual.
4. Next the installer will install NiceLabel. NiceLabel is an easy-to-use software application for making your labels and creating barcodes.
5. Click **Finish** to complete the install.

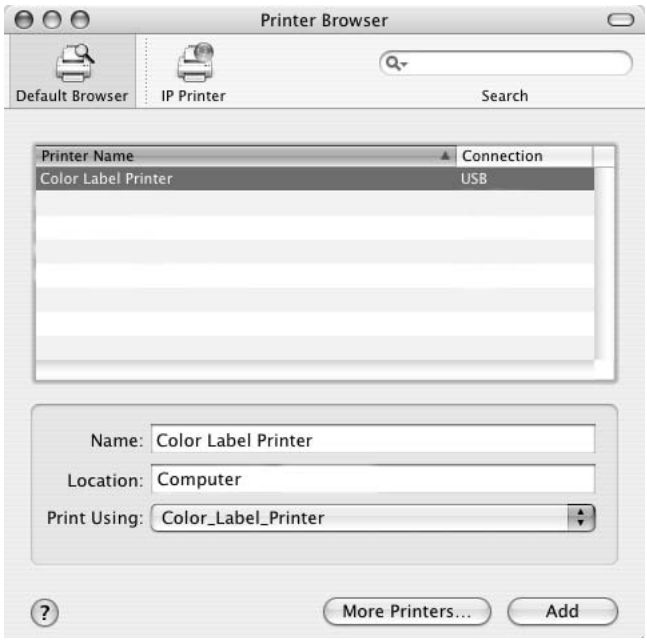
Note: *For optimal printing speed you MUST reboot the PC after installing the software!*

Mac Installation

1. Insert the Installation CD into your computer. In a few moments the Color Label Printer Icon should appear on your desktop.
2. Double click on the **Color Label Printer Icon**.
3. To run the installation, click on the **ColorLabelSeries.pkg** file.
4. Follow the on screen instructions to install the software.
5. Apply power and plug in the USB cable. Wait for the printer to initialize (lights will stop flashing) before moving to the next step.
6. After the software is installed you will need to add the printer. Open the Printer Setup Utility located in the Applications - Utilities folder.



7. Click **Add**. Select the Color Label Printer from the list of available printers. Click **Add** again.



Section 2: Supplies and Driver Settings

A. ABOUT INK CARTRIDGES AND LABEL MATERIAL (PIGMENT-BASED VS. DYE-BASED INKS, GLOSS VS. PLAIN PAPER)

Label Material: Primera's TuffCoat High Gloss and Semi-Gloss label materials have been specifically designed to be highly absorbent to allow water-based inkjet inks to dry quickly. While providing for immediate smudge-resistance after printing, this characteristic also makes the sheet receptive to certain airborne contaminants and could result in a discoloration of unprinted areas. Proper testing in the final application environment is strongly recommended, especially when used on or near products with aromatic vapors or products containing volatile solvents.As with all pressure sensitive materials, this product should be tested thoroughly under end-use conditions to ensure it meets the requirements of the specific application.

Ink Cartridges: For full-color printing, a 3-color ink cartridge is available. This cartridge contains the three process-color inks of yellow, magenta, and cyan, which combine to produce up to 16.7 million printable colors and works very well on all label stocks.

Two different Monochrome ink cartridges are available for the printer. First is the Pigment-Based Monochrome Black. Pigment-Based inks are for use with plain paper stock. Plain paper stocks are desirable because of their low cost but offer little resistance to water. The second type of black cartridge available is the Dye-Based Monochrome Black. Dye-Based inks are formulated for high-gloss and semi-gloss label stock.

Ink	Recommended Label Stock
Pigment-Based Monochrome Black PN 53020	Plain Paper Label Stock
Dye-Based Monochrome Black PN 53377	Semi-Gloss and High-Gloss Paper Label Stock

Mono Ink/ Label Compatibility

NOTE: *If you are printing barcodes on your labels it is recommended that you test your combination of label stock and cartridge to make sure the barcodes can be read accurately prior to committing to a large purchase of supplies.*

B. INSTALLING LABEL STOCK

Your printer will utilize a wide variety of paper label stock. As long as the label stock is paper and can receive ink jet printing and is within the allotted size, it will work in the printer. Primera carries a large variety of paper label stock that has been converted and ready for use with your printer.

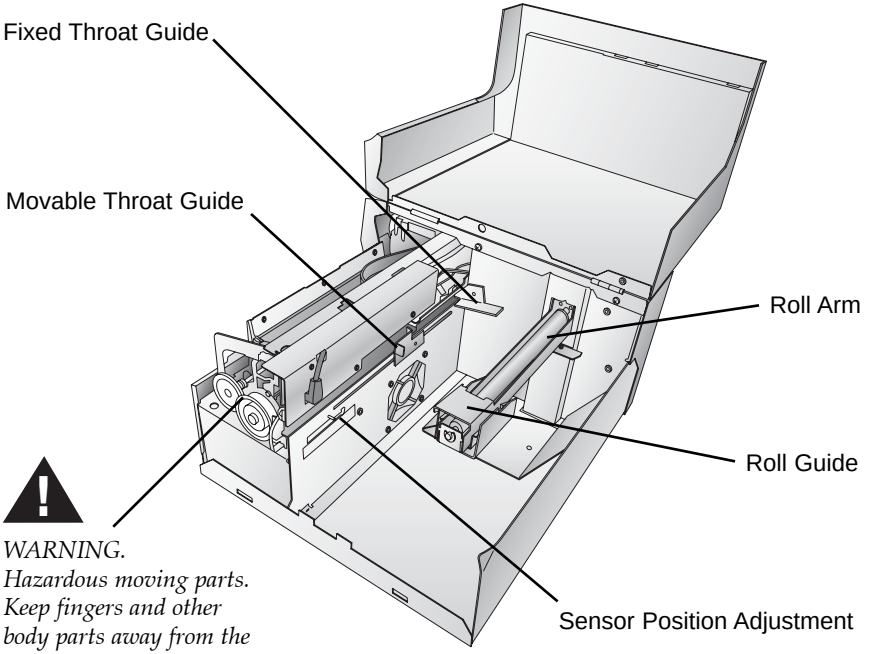
NOTE: *All the stock listed on Primera's supply order sheet is semi-gloss or gloss and is meant for use with the Dye-Based Black Ink. You can use other stock if you like. If using plain paper stock, you will most likely have success with the Pigment-Based Black Ink. It is recommended that you test your stock and ink combinations before committing to a large supply purchase.*

Other paper label stock may also work properly as long as it is in specification. Use the following table to identify if a certain stock is within specification:

	Max Roll Outside Diameter	Core Inside Diameter	Minimum Label Width	Maximum Label Width	Minimum Label Height	Maximum Label Height
Inches	6	3	1.5	8.25	.75	24
Millimeters	152.4	76.2	38.1	203.2	19.05	609.6

Label Stock Compatibility Chart

The following illustration shows the internal parts you should be familiar with when loading stock into your printer:



WARNING.
Hazardous moving parts. Keep fingers and other body parts away from the paper-feed gears.

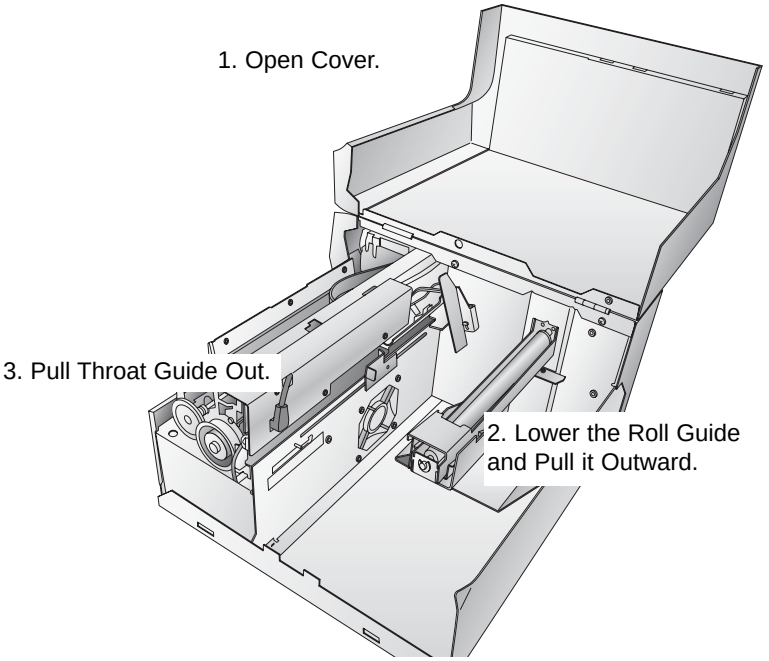
Installing Label Stock

The following steps will guide you through loading label stock in your printer:

Make sure power is connected and printer is on.

1. Open the Top Cover.
2. Lower the Roll Guide and pull it outward to make room for your label stock.

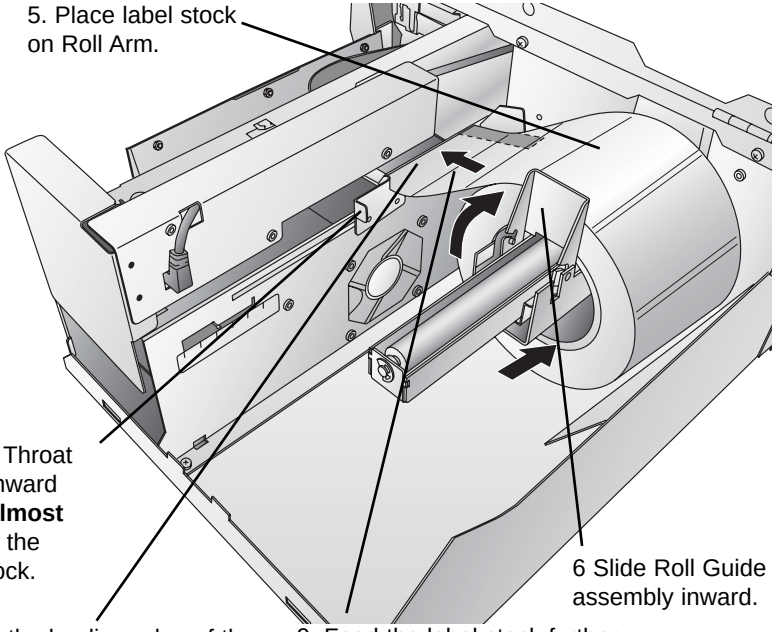
3. Pull the Movable Throat Guide outward to make room for the label stock.



4. Remove any shipping tape from your label stock roll to ensure that it can unroll freely, making certain that no adhesive portion is exposed. It is important to note that any exposed adhesive surface can attach itself the the inner workings of the print mechanism and cause a media jam.
5. Place your roll of label stock on the Roll Arm and push it inward until it touches the stop.
6. Flip up the Roll Guide and slide it inward until it touches the label stock. (The Roll Guide will automatically pull back slightly to the correct position)
7. Place the leading edge of label stock under the "label stock" symbols on the Throat Guides.

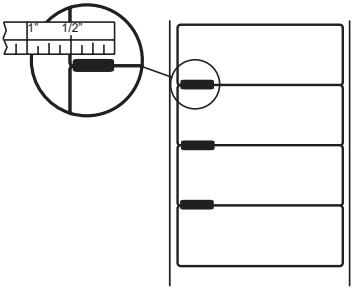
The label stock should be placed far enough into the throat of the printer to correctly position the Movable Throat Guide but not yet into the printer itself. The label stock should be biased against the Fixed Throat Guide.

8. Slide the Movable Throat Guide inward until it **almost** touches the label stock. There must be slightly more space between the Throat Guides than the width of the label stock. If the label stock is pinched by the guides, poor print quality or even feeding problems could result.

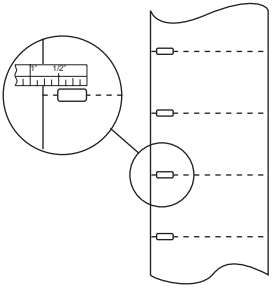

5. Place label stock on Roll Arm.
8. Slide Throat Guide inward until it **almost** touches the label stock.
6 Slide Roll Guide assembly inward.
7. Place the leading edge of the label stock just past the Throat Guides, but not into the printer itself.
9. Feed the label stock further into the printer until it senses the label and automatically feeds it through the printer.

9. Feed the label stock further into the printer until it senses the label and automatically feeds it through the printer. If the printer fails to feed the label stock, press the Feed button on the front panel while continuing to guide the label stock into the printer. The printer can sense through-hole stock as well. If you are using label stock that has a hole punch to identify a transition from backing to label, you can adjust the **Sensor Position Adjust** tab to position it

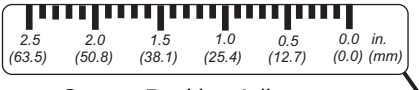
over the identifying mark. The **Sensor Position Adjust** tab has a guide in inches and milimeters that will help you identify where to set the tab to align the sensor over any identifying mark. To do this, simply measure from the center of the hole or mark to the edge of the label stock. For instance, if you have a 1/2 inch hole, which starts 1/4 inch from the edge of the label stock set the guide to 1/2 inch to make sure the sensor is in the middle of the through hole.



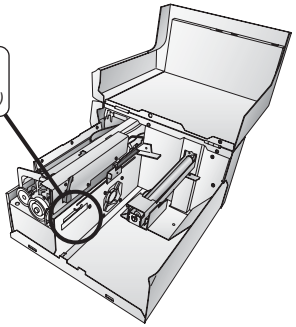
Black Stripe



Through-hole



Sensor Position Adjustment



NOTE: If you are using black stripe sensing label material you will need to identify this in the printer driver under the Sensor Type setting. Please refer to section D later in this chapter for more information on changing driver settings.

12. Now your stock is installed. Please read the following section to install your cartridges.

C. INSTALLING INK CARTRIDGES

Your printer has a built-in ink tracking system. This system is designed to warn you if your ink cartridges are low on ink. This ensures your labels will print properly and that the printer can create large batches of labels unattended and worry-free.

In order to make this system work properly, the cartridges must be changed using the procedure listed below. Failure to follow this procedure could result in inaccurate ink level tracking and could cause your print quality to suffer.

Ink cartridges are changed as follows:

If using a PC:

1. Click **Start>Printers and Faxes.**
2. Right-click on the **Color Label Printer Icon.**
3. Click on **Printing Preferences** from the drop-down menu.
4. Find the option labeled "**Clean/Change Cartridges & Check Ink…**" and click "**Properties**".
5. Click "**Change Cartridge(s)**".

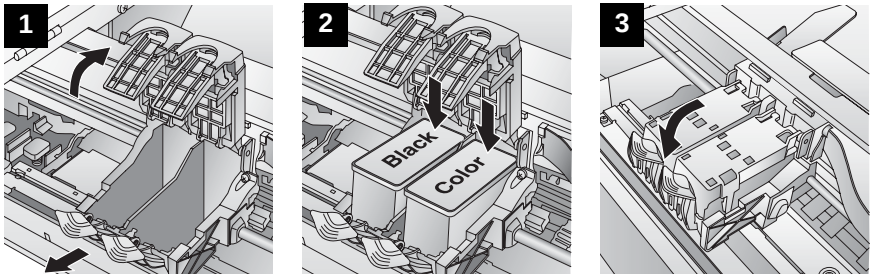
If using a Mac:

1. Open the Applications - Utilities folder.
2. Click on the **Printer Setup Utility**.
3. Select the Color Label Printer.
4. Click the **Utility button** on the menu bar.
5. Click the **Change Cartridge button**.

For Macintosh and PC:

6. Open the Top Cover of the printer.
7. The Cartridge Carrier will align itself to the center of the print area.
8. Press the Cartridge Cover Release to open the Cartridge Holder.
9. Replace/install the cartridge.
10. Push cartridge cover downward until it snaps in place.

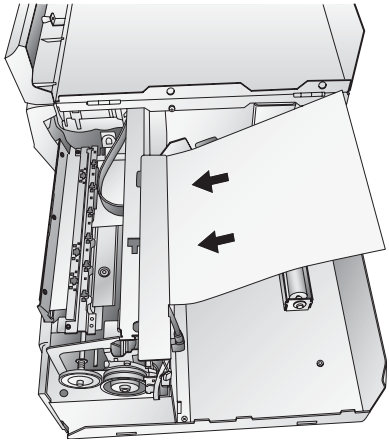
11. Click **OK** on your screen to indicate the new cartridge is now installed. Once you click **OK** you will be prompted to align the cartridge. The printer will automatically align the cartridge for you as follows:



a. For Alignment you will need to have installed label stock that is equal to or larger than 4" x 4" (101.6 mm x 101.6 mm). If your stock meets this requirement, skip to step d.

b. If your installed stock is smaller than 4" x 4", unload your current stock by pressing the **Unload** button. The printer will reverse the label stock so that it can be removed from the printer.

c. Load a sheet of paper, not to exceed 8.25 inches or 209 millimeters in width, by first pulling the Throat Guide all the way out, then placing it In the feed area, once the printer senses the page it will pull it into place.



d. Click **OK.**

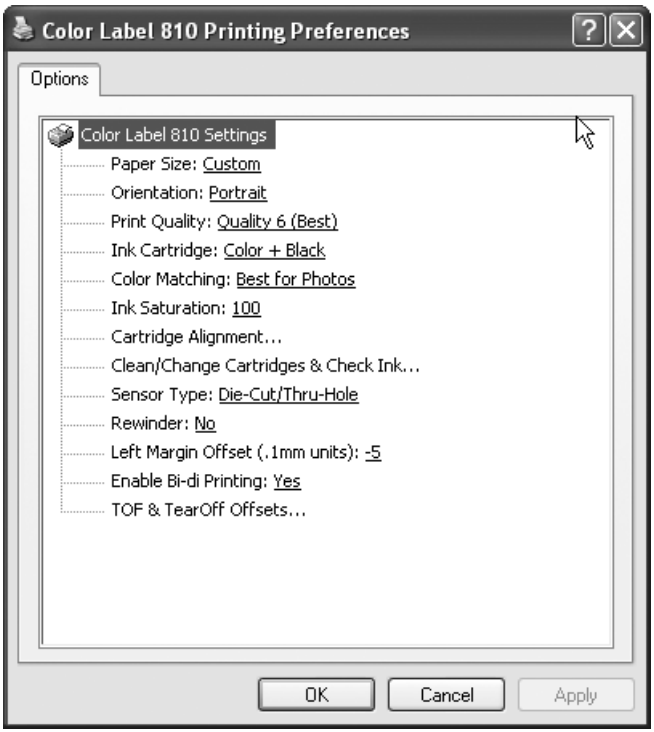
e. The printer will print the alignment test and scan it into memory. Once the alignment is complete you will see a confirmation dialogue box on your monitor. Click **OK**. You have successfully installed the ink cartridges.

D. PRINTER DRIVER SETTINGS

Once the printer driver has been successfully installed, you will need to set the driver up with the appropriate print options. Refer to the following steps to change or verify your printer driver options:

To find Driver Settings on a PC:

1. Click the **Start** button, then click **Printers and Faxes**. Right-click on the Color Label Printer Icon and select Printing Preferences from the drop-down menu.

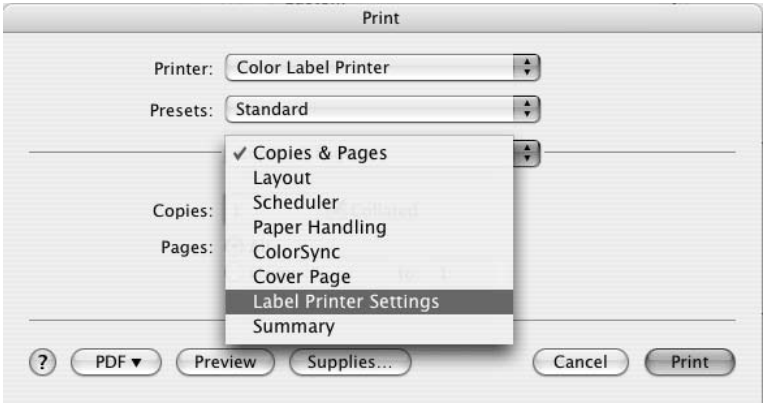


NOTE on PC Settings:

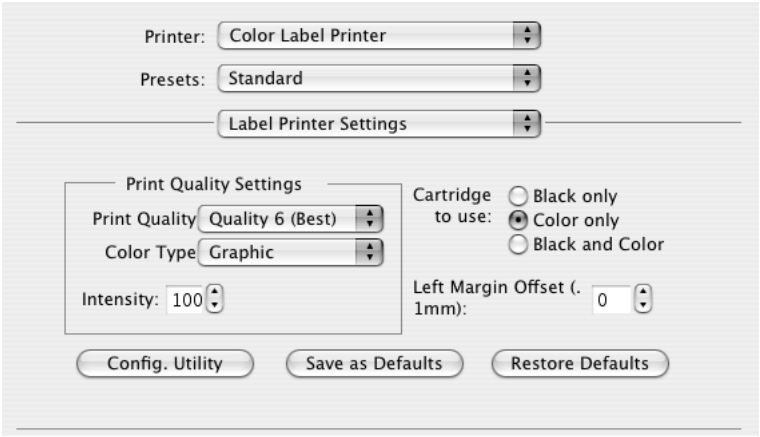
Most applications allow you to change these same printer driver options from their "Print" and/or "Printer Setup" screens. This means that you don't have to go back to the main printer setup window each time you want to change a setting or option in the printer driver. These applications will usually give you the same choices and options, but in a slightly altered format. Most applications do not save your printer driver option changes, but instead only use your changes for the current image.

To find Driver Settings on a Mac:

Click **Print** from within any printing application. The following screen will appear:



Click the **Copies and Pages** drop down arrow. Choose Label Printer Settings.



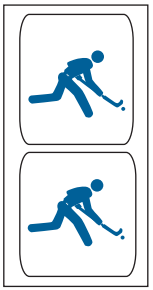
The following options are present in both the PC and Mac drivers:

Label Size

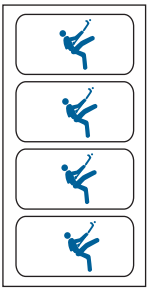
This option is set to Custom as a default. Even though you can click **Properties** and key in the dimensions of your label, this is best done from your labeling software. It is recommended that the Label Size setting is left to "Custom".

Orientation

There are two settings for orientation, Portrait and Landscape. If your text and graphics print left to right or as shown on the screen, select portrait . If you wish your printing to rotate 90 degrees from what you see on the screen so it is printing horizontally, select landscape as your orientation.



Portrait



Landscape

Print Quality

There are 6 levels of print quality in the driver. The lower the Quality, the faster the print. Quality 1 provides the fastest print available while Quality 6 provides the best photo quality. It is recommended that you experiment with the different levels when designing your label to find a good balance between print quality and print speed.

Color Matching.

Best for Graphics mode is best used for graphical images where accurate color reproduction is not as essential. Images printed in this mode will look more vibrant because more ink is being used to produce them. However, printing images of people may produce skin tones that have a reddish tint.

Best for Photos mode is best used for photographic images where accurate color reproduction is very essential. Images printed in this mode will look lighter than those printed in Photo mode. Skin tones especially will look more natural in this mode.

NOTE: *Exact color matching of the printed labels to the screen may never be possible since there are factors that affect this out of the drivers control. The surface of the label reacts with the ink in the cartridge to produce the color. For this reason, when printing the same image to different types of labels with different surfaces the printed output can look entirely different.*

Ink Saturation

This option controls the amount of ink used when printing an image. The default setting is 100%, which will provide the most accurate color matching. If the ink is not drying fast enough or bleeding, you can decrease the Ink Saturation to lessen the amount of ink that is applied to the label.

Left Margin Offset

This will be factory calibrated. If fine tuning is needed, increase this setting to move the image right on the label; decrease this setting to move the image to the left on the label. The unit of measure is 0.1mm.

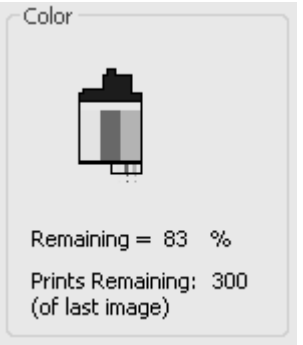
On a Mac the following settings can be found by clicking the Config. Utility button.

Cartridge Alignment

Cartridge alignment will align the Black Cartridge to the Color Cartridge. You will automatically be prompted to perform this alignment each time you install a new cartridge. If you find that the black objects are not aligning properly with color objects on your label you can run the alignment procedure from the printer driver. Click on **Cartridge Alignment** and you will see a **Properties** button. Press this button to start the Alignment procedure. You will be prompted to have label stock of 4"x4" (101.6mm x 101.6mm) or larger. If the loaded stock does not meet this requirement it can be unloaded by pressing the Unload button. Insert larger stock or feed a

sheet of paper (no wider than 8.25 inches or 209mm) into the print area then click **OK** to continue. The printer will print an alignment pattern then scan that pattern into memory automatically. Once it has finished you will see a dialog box stating that alignment values have been saved.

Clean/Change Cartridges & Check Ink Levels



Click this setting and you will see a **Properties** button. Click **Properties** and you will see the ink levels as well as buttons allowing you to either clean or change your ink cartridges. If you have printed a label you will see an estimation of prints remaining of the last label.

This number can also be used to calculate total number of labels you can print from one cartridge and also ink cost per label. Use the following formula:

Labels Remaining X 100 / Percentage of Ink Remaining = Total Labels from a Full Cartridge.

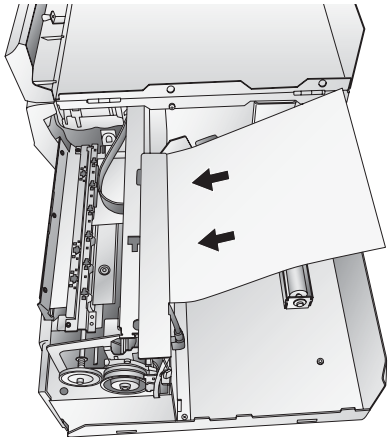
In the example above 300 X 100 / 83 = 361 labels from a full cartridge. Use the cost of the ink cartridge divided by the total labels from a full cartridge to receive cost per label.

Clean/Purge

If it has been more than 48 hours since your last print or if your print quality has deteriorated with bands or lines it is recommended that you clean the cartridges. This is done by clicking the **Clean/Purge** button. The Clean Purge is done as follows:

a. You will be prompted to load label stock of 4"x 4" (101.6 mm x 101.6mm) or larger, into the printer. If you have stock of this size or larger, simply click **OK**.

b. If not, press the Unload button found on the front of the printer simultaneously to reverse the stock out of the print feed mechanism. Load a sheet of paper, not to exceed 8.25 inches or 209 millimeters in width, into the feed mechanism by pulling the Throat Guide all the way out to make room for the paper then inserting a sheet into the print feed area.



Once the sensor "sees" the paper it will automatically feed it into position and will begin to print.

c. The printer will print a purge pattern where swaths of each color are printed to clean the jets of the cartridge. A series of diagonal lines are printed in each color of both cartridges. By examining this pattern you can tell if the cartridge is firing all jets or if the cartridge is dirty and requires further cleaning. While the blocks of color may not print solidly, it is important that the diagonal lines be continuous. Repeat this process until all diagonal lines print without breaks.

Change Cartridge(s)

Click the **Change Cartridge(s)** button to move the cartridges into position for easy access for replacement. For more information on this see **Section 2-C**. When installing cartridges you will be prompted to align your cartridges as described earlier in this section.

Details/Print Counter

Clicking on the **Details** button will allow you to view information about printer settings stored on the printer. There is also a **print counter** in the details window to help you count the number of labels printed since the last time it was reset. Click **Reset Counter** to set the counter to zero. The **Restore Factory Defaults** button will restore the printer settings displayed on the details window to factory calibrated defaults.

Sensor Type

Sensor Type refers to the method the printer will use to center the print image on your label material. If you are using standard die-cut labels or Through-hole label material where a hole is punched through each label for alignment purposes use the **Through-hole/Die-Cut** setting. Use **Reflective** for black stripe sensing label material where a pre-printed line indicates the break between labels. If you have continuous stock with no die-cut or reflective mark, set the sensor type to **Continuous**.

Rewinder Mode

This defaults to No. When set to no, the printer will align your labels with the tear off bar for easy removal. This mode can be set to Yes when using the printer with an automatic rewinder.

Enable Bi-di Printing

This setting defaults to Yes for fastest printing. When enabled you will be required to perform an alignment print after a new cartridge is installed. If you would like to bypass cartridge alignment set this setting to No and set the Cartridge Type setting to Color. You will now be able to skip the alignment print after changing cartridges.

TOF Offset

TOF stands for **T**op **o**f **F**orm and this setting allows you to fine tune the alignment of your printing on your label stock. This will be factory calibrated. If fine tuning is needed, increase this value to move the image down on the label. Decrease this value to move the image up the label. The unit of measure is 0.1mm.

Tear Off Offset

If Rewinder Mode (described earlier in this section) is set to No, the printer will present your labels over the Tear Bar for easy removal. This is set at the factory. If fine tuning is needed to align the break in your label stock over the Tear Bar, increase this setting to eject the label further; decrease this setting to eject the label stock less. The unit of measure is 0.1 mm.

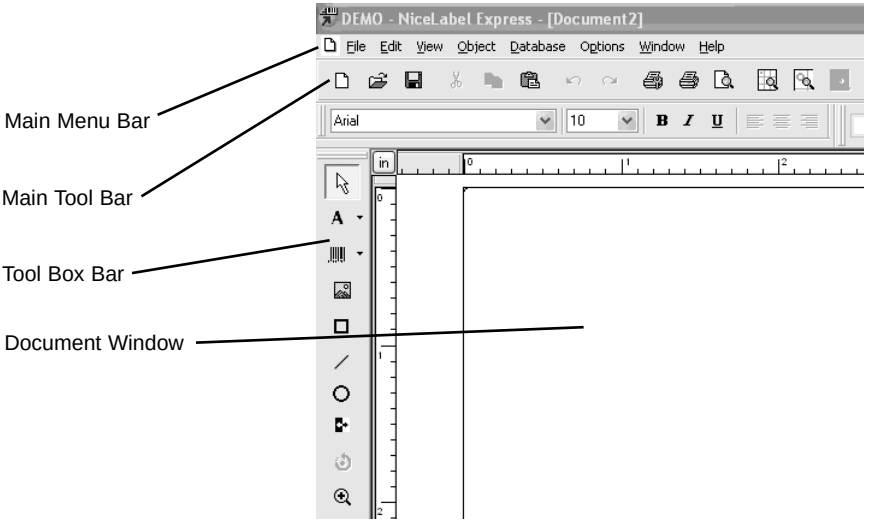
Section 3: Using the Printer

A. USING NICELABEL

Your printer ships with a basic version of Niceware's NiceLabel software. This easy-to-use software is designed to allow you to create full color labels with text and barcodes quickly and simply. The following is a tutorial to guide you through creating and printing a sample label.

Launch NiceLabel from your computer's Start Menu. Take a moment to familiarize yourself with the NiceLabel Main Application Window. This will help you navigate the features of this program.

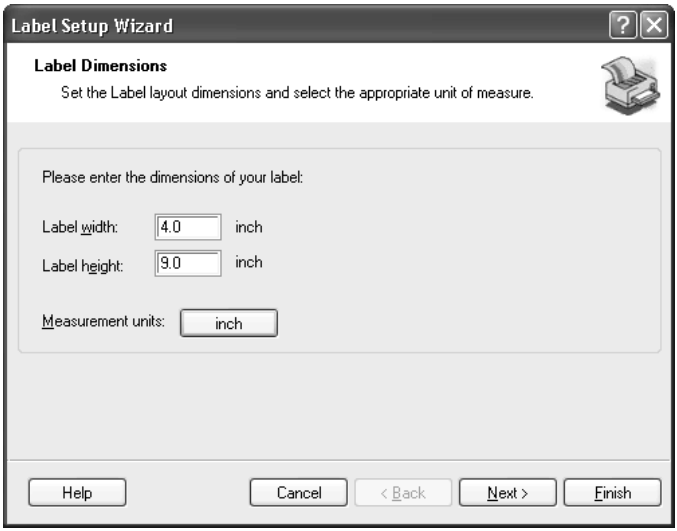
Main Application Window



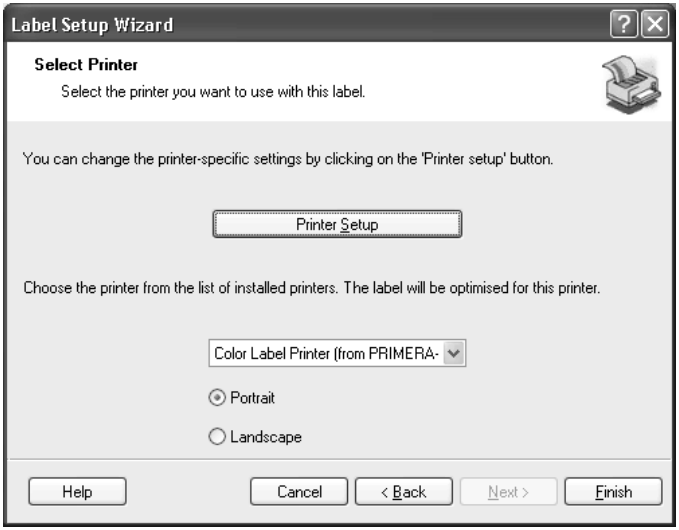
Creating a label

1. Click the **New Label Icon** from Main Tool Bar.
2. You will see the **Label Setup Wizard**. This will guide you through setting up your label.

a. Set the dimensions of your label and unit of measure and click **Next**.



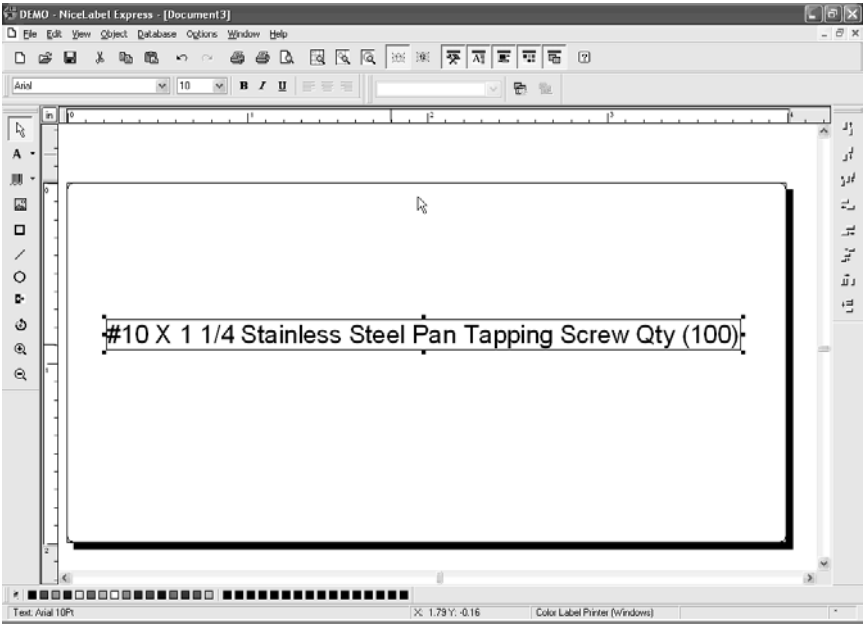
b. Select your printer. This should be the Color Label Printer. Click **Finish**.


Label Setup Wizard
Select Printer
Select the printer you want to use with this label.
You can change the printer-specific settings by clicking on the 'Printer setup' button.
Printer Setup
Choose the printer from the list of installed printers. The label will be optimised for this printer.
Color Label Printer (from PRIMERA-
Portrait
Landscape
Help
Cancel
< Back
Next >
Finish

3. Now you will see your label in the Document Window. You can start to design your label using Tools from the Tool Box. First, we will use the Text Tool.

Text Tool Icon Text Cursor

   a. Click the **Text Tool Icon** in your Toolbox, then move the text cursor over the Document Window and click in the location where you want to enter text. There is no need to be exact, once you enter your text it can easily be resized and/or moved about the label. Upon clicking in the Document Window, you will see a prompt to start typing your text.
   b. When finished typing, click anywhere in the Document Window and you will see the text appear in a box with "edit handles". You can drag and resize the text anywhere in the document window. If the text is dragged off of the printable area, NiceLabel will turn the text red as a warning. This will not change the color the text prints out as when sent to the printer but is only used as a warning to let you know you may not be printing the full text on your label.

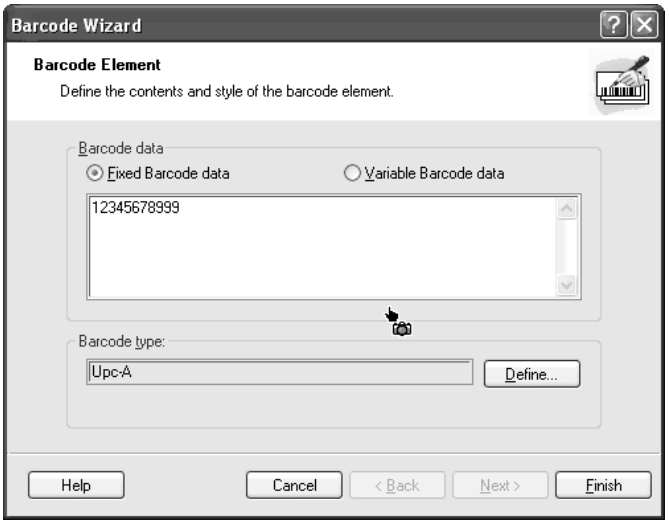

DEMO - NiceLabel Express - [Document3]
File Edit View Object Database Options Window Help
#10 X 1 1/4 Stainless Steel Pan Tapping Screw Qty (100)
Text, Arial 10Pt
X: 1.79 Y: -0.16
Color Label Printer (Windows)

4. Now, insert a barcode.

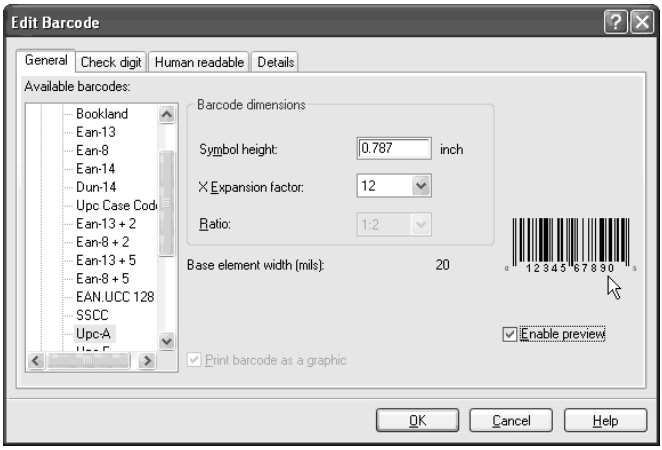
BarcodeTool Icon Barcode Cursor

a. Click the **Barcode Tool Icon** from the Toolbox. You will now have a Barcode Cursor that can be positioned anywhere within the Document Window. Position your cursor in the general area where you wish your barcode to print and click to start entering your barcode information. There is no need to be exact, once you create your barcode it can easily be moved and/or resized. Once clicked, you will see the Barcode Wizard.

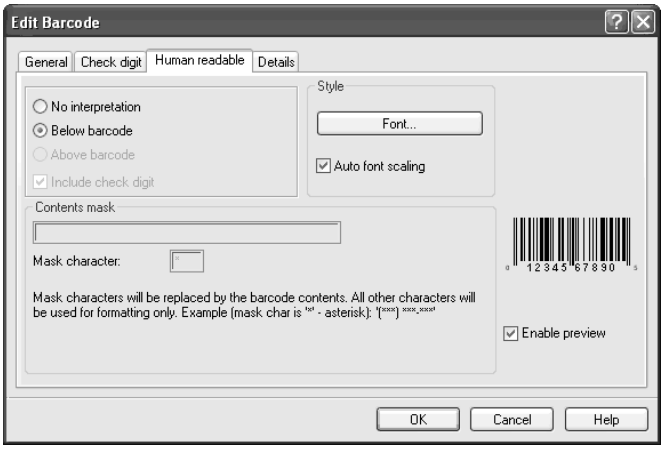
b. The first screen in the Barcode Wizard will allow you to select the type of Barcode you wish to print. You can also enter the data to be used in the barcode. For this we are doing a simple UPC-A barcode. For more information on other types of barcodes, please see **Section 3-B. Creating Barcodes in NiceLabel**.



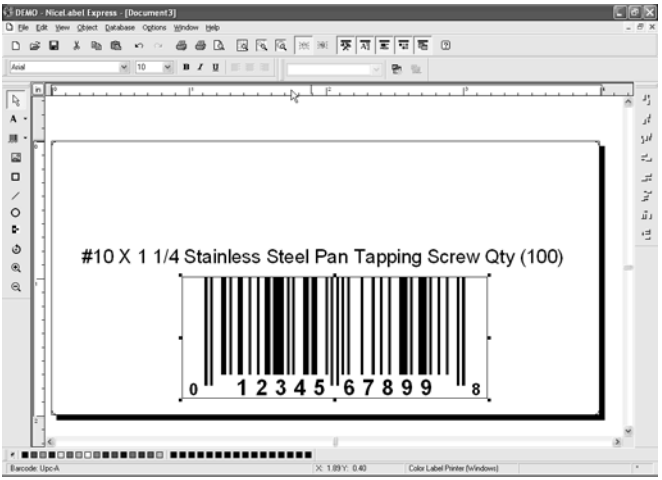
c. Click **Define** to change the type of Barcode or to make changes to the options associated with your particular type of barcode. You will also want to set the **Symbol Height** and **X Expansion Factor**.



d. Click the **Human Readable** tab to change the font that prints under your barcode.

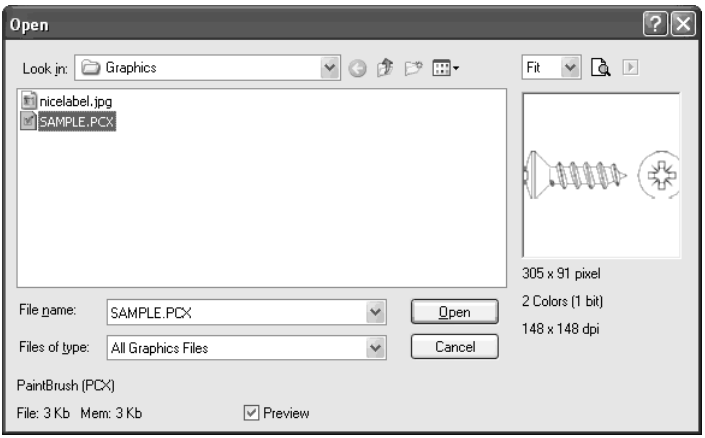


e. Click **OK**, then click **Finish** and your Barcode will be placed on your label with "Edit Handles" to allow you to move and resize your barcode.

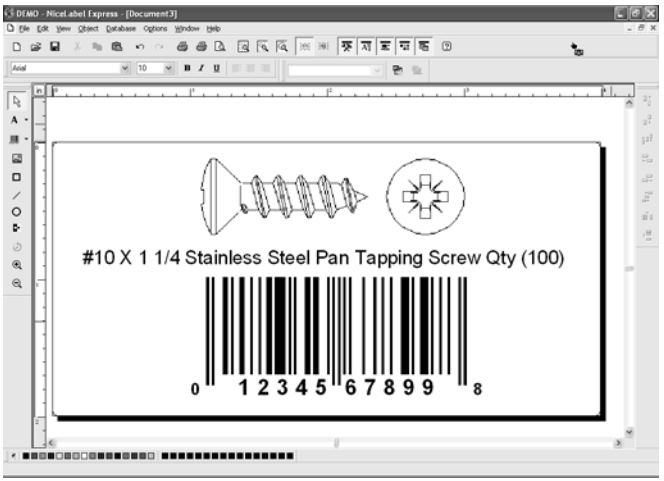


Graphics Tool Icon Graphics Cursor

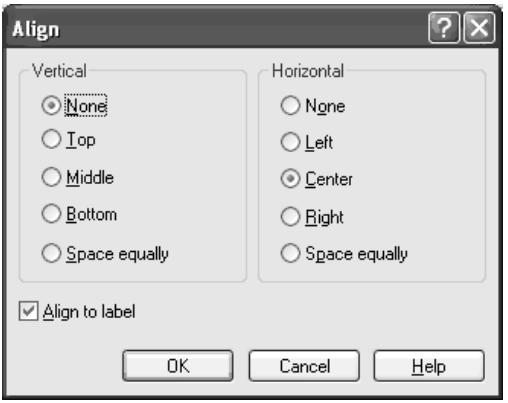
5. Now insert a graphic. Click on the **Graphics Tool Icon** in the toolbox. You will now see a Graphics Cursor. Drag the cursor to the general area where you wish to place the graphic and click to get an Open dialog box. You will be prompted to browse for graphic files. NiceLabel will accept bitmap graphics formatted as BMP, JPG, TIF, WMF, PNG and many more.



a. Click **Open** and the graphic will be imported with edit handles so you can easily move and resize your graphic.



b. There are other tools at your disposal to align the object or add shapes. On the right side of the screen you will see alignment tools so you can align the objects on your label in relation to each other. Select objects by clicking on them or clicking and dragging a "lasso" around multiple objects or by holding down the SHIFT key and clicking on each object individually. You can also center these objects by right clicking on a selected object and choosing **Align** from the drop-down menu. If you wish to center your object on the label choose the appropriate centering options and check the **Align to Label** checkbox.



c. You are now ready to print your label. Click **File** then **Print** from the main menu. Choose your number of copies and click **OK**.

Congratulations! You have successfully created and printed your first label. The rest of this section will explain in more detail how to use barcode labels. Also, you can find more tips and hints by simply clicking **Help** then **Contents** in the main menu.

B. CREATING BARCODES IN NICELABEL

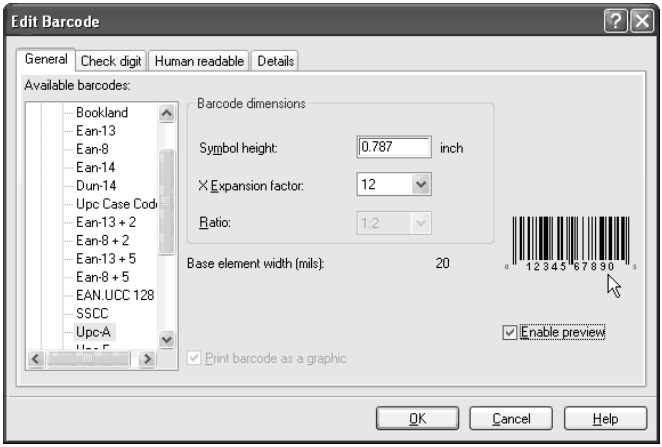
Barcode Tool Icon Barcode Cursor

a. Click the **Barcode Tool Icon** from the Toolbox.

b. You will now have a Barcode Cursor that can be positioned anywhere within the Document Window. Position your cursor in the general area where you wish your barcode to print and click to start entering your barcode information. Once clicked, you will see the Barcode Wizard.

i. The first screen in the Barcode Wizard will allow you to select the type of Barcode you wish to print. You can also enter the data to be used in the barcode.

ii. Click **Define** to change the type of Barcode.



iii. This contains four tabs, **General**, **Check Digit**, **Human Readable** and **Details**.

iv. The **General Tab** (shown on page 27) allows you to choose the appropriate barcode type from the **Available barcodes**: menu. You can choose one- or two-dimensional barcodes. Note that different barcode types have different requirements - some of them only allow numbers to be encoded, while others only allow upper case characters. For the further help on the barcode types contact your supplier.

Available barcode types are listed here:

EAN and UPC	EAN-8, EAN-8 + 2-digit supplement, EAN-8 + 5-digit supplement, EAN-13, EAN-13 + 2-digit supplement, EAN-13 + 5-digit supplement, EAN-14, DUN-14, UPC Case Code, UPC-A, UPC-A + 2-digit supplement, UPC-A + 5-digit supplement, UPC-E, UPC-E + 2-digit supplement, UPC-E + 5-digit supplement, EAN.UCC 128, SSCC, Bookland, Addon 2, Addon 5
Linear	Interleaved 2 of 5, ITF 14, ITF 16, Code 39, Code 39 Tri Optic, Code 39 Full ASCII, Code 32, Code 93, CODE 128 (A, B and C subsets), MSI, Codabar, Postnet-32, Postnet-37, Postnet-52, Postnest-62, Kix, Pharmacode
RSS	Linear RSS symbologies RSS14, RSS14 Truncated, RSS14Stacked, RSS14 Stacked Omnidirectional, RSS Limited, RSS Expanded Composite RSS symbologiesRSS14, RSS14 Truncated, RSS14 Stacked, RSS14 Stacked Omnidirectional, RSS Limited, RSS Expanded, UPC-A, UPC-E, EAN-8, EAN-13, EAN.UCC 128 & CC-A/B, EAN.UCC 128 & CC-C
2D Barcodes	2D-Pharmacode, PDF-417, DataMatrix, MaxiCode, Aztec, QR, Micro QR, Codablock F, MicroPDF

Define the barcode dimensions in the **Barcode Dimensions Field**. The height is set in cm by entering the appropriate number in the **Symbol Height Field**. The width of the barcode is set as the **X Expansion factor**. Note that the width can be set only in pre-defined standard steps.

When you change the barcode dimension directly from the screen by moving the drag handle, the changed dimension will also appear in this dialog box.

Some of the barcode types also allow the definition of Narrow-to-wide bar ratio. It can only be set from the predefined steps in the pull-down menu - 1:2, 1:3 or 2:5.

Base element width (mils) is calculated automatically from the X expansion factor.

v. The **Check Digit Tab** will allow you to include a system automated check digits or enter your own. Check digits can be disabled on some barcodes from this tab as well.

vi. The **Human Readable Tab** allows you to manipulate the human readable text printed with your barcode. Here you can disable Human Readable, select position (above or below the barcode), include a check digit, and choose your font type and scaling.

vii. The **Details Tab** allows you to set some further details of the barcode presentations on the printer. These settings are listed here:

Include Quiet Zones will enable the software to automatically create the necessary amount of free space before and after the barcode symbol by drawing an unprintable buffer area around the barcode symbol on the screen.

Descender Bars allows EAN 13, EAN 8, UPC A and UPC E to print longer first, middle and last bars when this option is selected.

Mirror Horizontally will allow the barcode to be printed as a graphic and will so it can be mirrored over the horizontal axis.

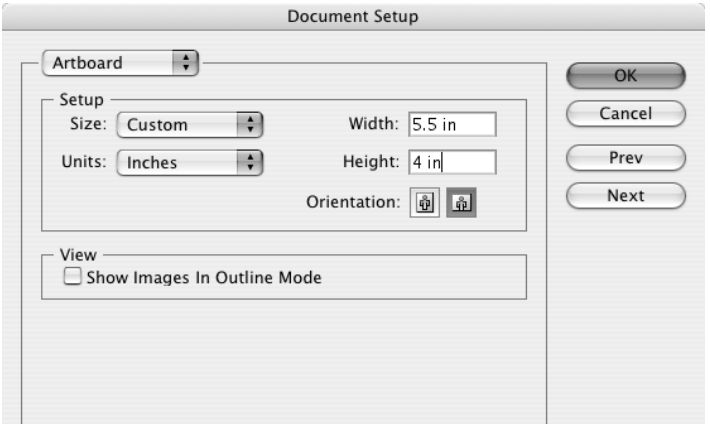
Mirror Vertically allows the barcode to be printed as a graphic so it can be mirrored over the vertical axis.

Intercharacter Gap: Some barcodes allow you to change the gap between characters in the barcode (e. g. Code-39). The barcode prints as a graphic.

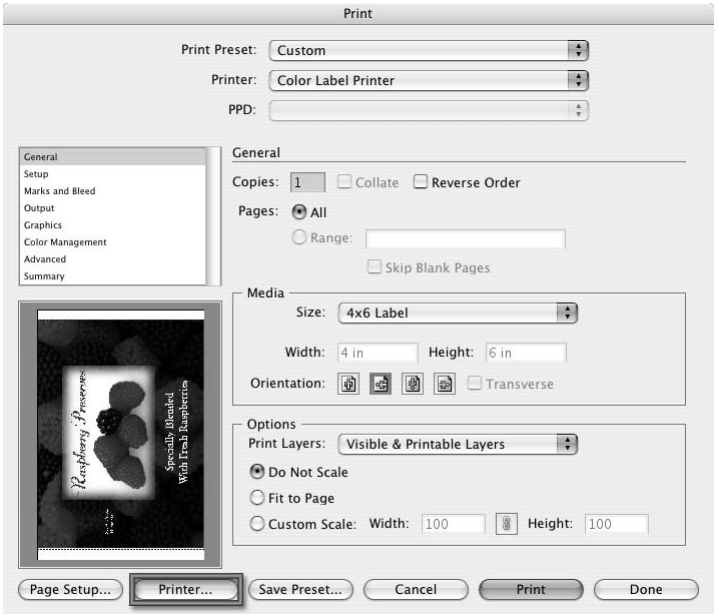
Include EAN white space: A special character is inserted before and/or after the barcode. It indicates the width of the barcode. If you place any other object in the extent of the barcode, it will reduce the readability of the barcode. This option is valid for EAN barcode types.

C. PRINTING ON A MAC FROM ADOBE ILLUSTRATOR

1. Create your document using the File - New command. Set your Width and Height to correspond with the label stock installed in the Printer.

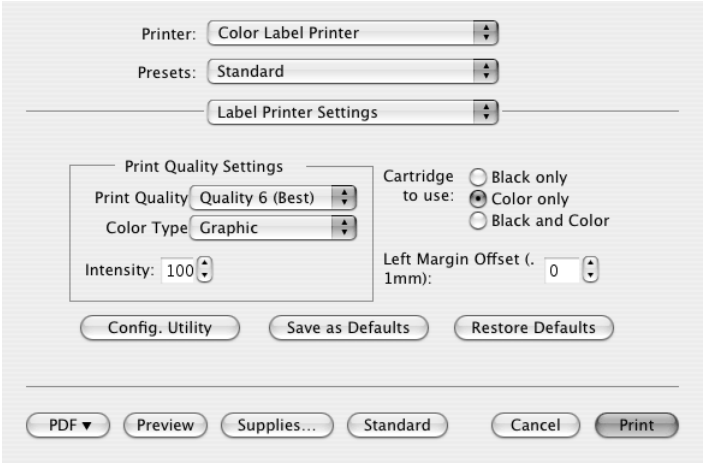


2. Once your document is created and ready to print go to File - Print. The following screen will appear. Before doing anything else, click the **Printer** button to change the print quality settings for this print. Click here for more information on Print Settings.

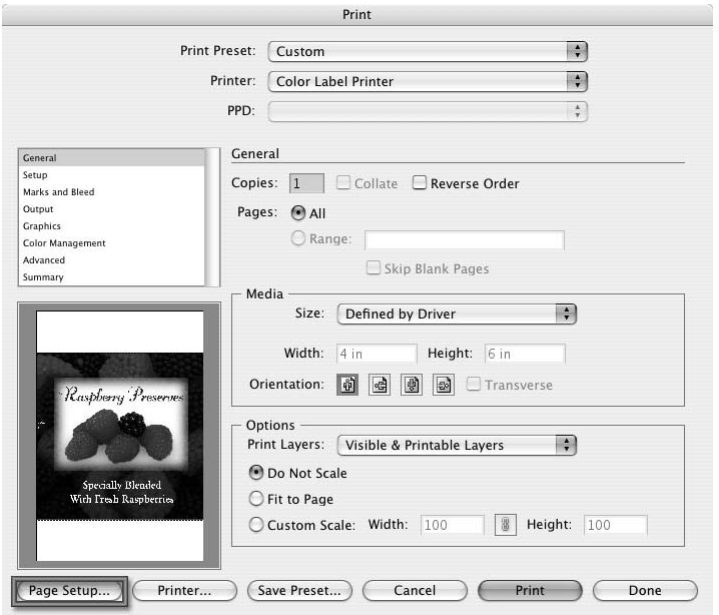


3. The printer settings screen defaults to Copies and Pages. Click the drop down arrow to change the screen to Label Printer Settings.

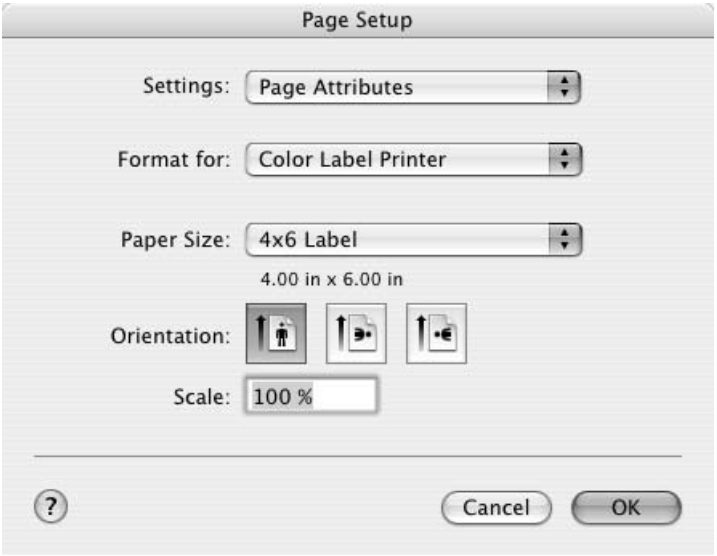
4. Change your printer settings to the desired quality.



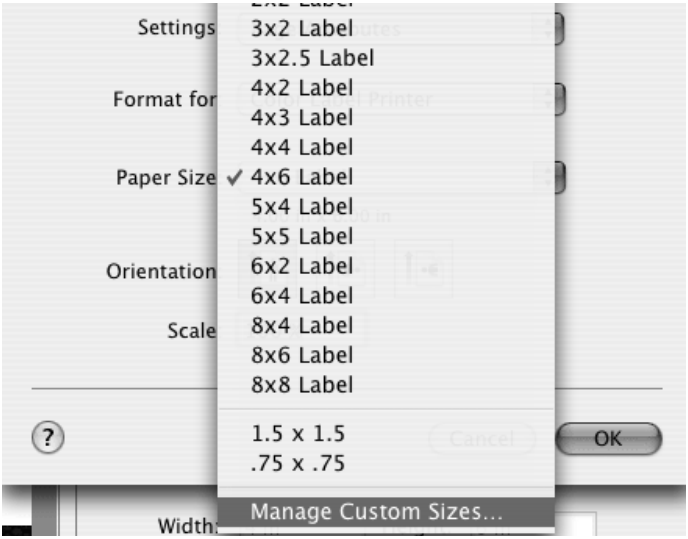
5. Click **Print** to return to the print preview screen. Now click **Page Setup** to change the label size set in the printer driver.



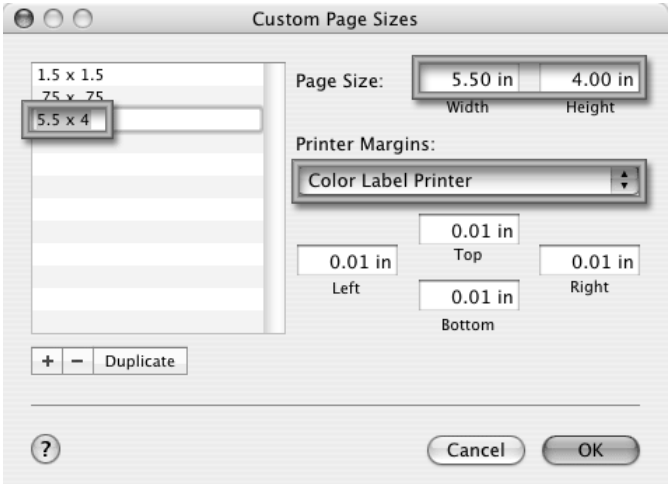
6. The paper/label size defaults to 4x6 or whatever was last used.



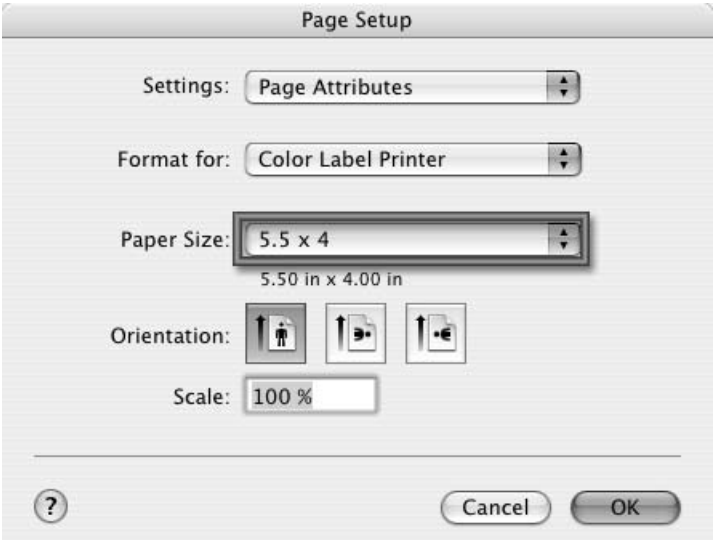
7. Click on the drop down arrow to select a predefined label size or create a custom size by clicking **Manage Custom Sizes**. For this example there is no 5.5 x 4 label predefined so the following step will explain how to create a custom size.



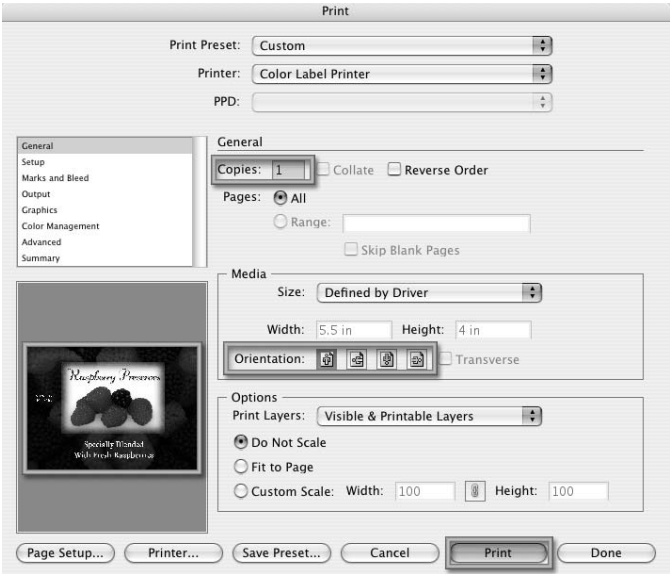
8. To create a custom size click the + below the list of custom sizes already created. Change the page size to correspond with the stock installed in the printer. Set the Printer Margins to Color Label Printer or modify them accordingly. Click **OK**.



9. If you have created a custom size you will need to choose it again here by clicking the drop down arrow and choosing the custom size. Click **OK**.



10. You are now ready to print your label. Make sure the number of copies is set. Also, check the orientation. The label shown on the preview screen is how your label will print. Make sure there is no white space around the label. If there is white space you may have to change the orientation. Click **Print** to print your label.



NOTE: You must set the Printer and Page Setup by clicking on these buttons each time you print. You must perform these steps each time you print even if what you see on the preview screen appears correct.

D. CREATING BARCODES ON A MAC

You can integrate barcode printing into any application that can print to the printer by using Mac Barcode Maker. Mac Barcode Maker can be purchased from their website at www.barcodeformac.com

This application was tested using Adobe Illustrator. Follow the instructions that are included with the application to use it with your program. Their website does offer a fully functional trial version which integrates an "EVAL" stamp into all of the barcodes it produces. Buying the application will cause the "EVAL" stamp to be removed.

Other barcode integration software is available but was not tested for compatibility with the printer.

E. PRINTING FROM OTHER APPLICATIONS

Because the printer installs as a standard Windows or Macintosh printer driver, it will print from virtually any Windows 2000/XP or Macintosh OS 10.x application. All you will need to do is create a custom page size the equivalent of your label stock size with margins set to "0". Then create your label and click **File > Print**. Select the Color Label Printer as your printer and select the number of copies. Click **OK** and your printer will print your labels.

Section 4: Troubleshooting and Maintenance

A. CLEANING THE PRINTER

It may be necessary to clean the ink cartridge nozzles if the your labels are printing with horizontal banding or if you suspect an ink cartridge nozzle has become slightly dried out or clogged. Refer to the cleaning procedure explained within the Clean/ Purge description of Section 2-D to clean the cartridge nozzles.

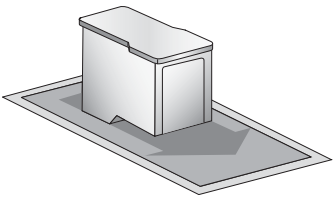
If any ink has gotten on to the printer casing itself, the case of the printer can be cleaned with an ammonia based window cleaner and a lint-free cloth.

Over time, ink overspray may gather at the base of the printer. The printer is designed using a vacuum system to gather most of this ink on a series of saturation pads. Eventually, these pads may need to be replaced. Contact tech support to determine if pad replacement is necessary. An ink pad replacement kit is available. (Part Number 074220)

B. CLEANING THE INK CARTRIDGE

It may be necessary to clean the ink cartridge nozzles if you notice reduced print quality, or if you suspect an cartridge nozzle has become slightly dried out or clogged. If you are having print quality problems, follow the steps below:

1. Remove the print cartridge.
2. Moisten a lint-free cloth with water.
3. Hold the cloth against the nozzles for three seconds. This will "wick" some additional ink onto the damp cloth.
4. Wipe in one direction only.
5. Repeat the process.



C. BASIC TROUBLESHOOTING

Generally, when a malfunction or an abnormal condition occurs, the "PAUSE " LED will keep blinking repeatedly and printing and communication between the host PC and the printer will cease.

After the problems have been solved, press PAUSE to clear the error and continue printing. Here is a general guide to some common error conditions:

Possible Problems	**Indicator**	**Solutions**	**Remarks**
Missing gap	Printer ejects media or can not find the start of the label, then times out with flashing "PAUSE" LED	• Check Media Path • Check Position of sensor	Refer to section 2-B for proper installation of label stock
Image printing off center or off the edge of the label	Label is not feeding straight, images look misaligned	• Check media path • Check throat guide and roll guide	Refer to section 2-B for proper installation of label stock
Out of label stock	Fast flashing "PAUSE" LED	• Install new label · stock/media	Refer to section 2-B for proper installation of label stock
Out of ink	Steady lit "LOW INK" and "PAUSE" LED and/or poor print quality	• Replace ink · cartridges • Perform alignment · • Perform cleaning	Refer to section 2-C for proper installation of ink cartridges
Media/label stock jam	Printer stalls, labels appear damaged, and "PAUSE" flashes quickly	• Press UNLOAD to reverse media • Be sure to clear and labels from inside of printer especially in the print path • Load new media	Refer to section 2-B for proper installation of label stock

D. TECHNICAL SUPPORT

If you have difficulty operating your Color Label Printer, the procedures in this manual should, in most cases, solve the problem. If you still have difficulty, contact Primera's Technical Support Department. You can reach tech support by phone, fax, email or mail at the following:

Primera Technology
Technical Support Department
Two Carlson Parkway North
Suite 375
Plymouth, MN 55447-4446

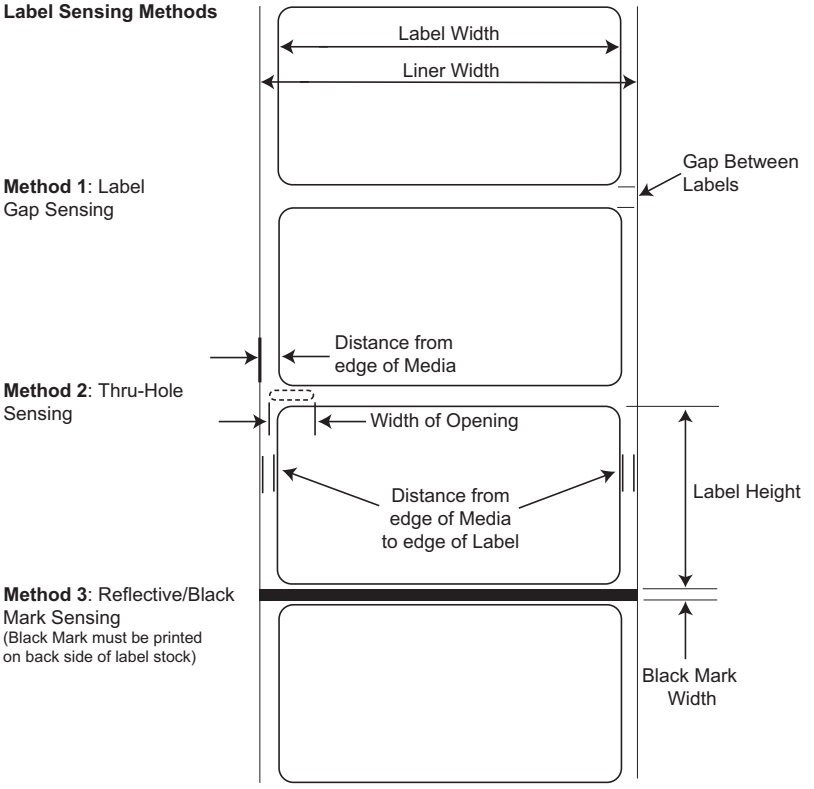
Phone: 763-475-6669
Fax: 763-475-6998
Email: support@primera.com
Web: www.primera.com

Live phone support is available Monday through Friday, 8 AM to 7 PM, Central Standard Time. Email support is available 7 days a week. A Knowledge Base containing answers to many common problems is also available for free 24 hours a day at www.primera.com/knowledgebase.html

Section 5 : Label Specifications

Important! *Test all custom made label stock with the intended printer before ordering large quantities! Primera will only assume responsibility for custom label stock ordered from Primera.*

Label Sensing Methods


Label Width
Liner Width
Gap Between Labels
Method 1: Label Gap Sensing
Distance from edge of Media
Method 2: Thru-Hole Sensing
Width of Opening
Distance from edge of Media to edge of Label
Label Height
Method 3: Reflective/Black Mark Sensing
(Black Mark must be printed on back side of label stock)
Black Mark Width

Note: See table below for Max and Min values in inches and mm..

	Max	Min
Label width	8.25" (210mm)	0.75" (19mm)
Liner width	8.375" (212mm)	1.5" (38mm)
Label height/length	24" (609.6mm)	0.75" (19mm)
Gap between labels	10" (253mm)	0.10 (2.5mm)
Width of thru-hole opening	0.5" (12.65mm)	0.25" (6.325mm)
Distance from edge of media to edge of thru-hole	2.25" (57mm)	0.20" (5.06mm)
Reflective/Black Mark Width*	N/A	0.1" (2.54mm)
Max Outer Diameter (OD)	6.0"(152.4mm)	N/A
Inner Core Diameter (ID)	3.0" (76.2mm)	3.0" (76.2mm)
Total Thickness (Liner + Label)**	.0075" (7.5 mil)	N/A
Distance from edge of media to edge of label	Printer driver assumes 2 mm gap. However, this is adjustable via the left margin offset.	

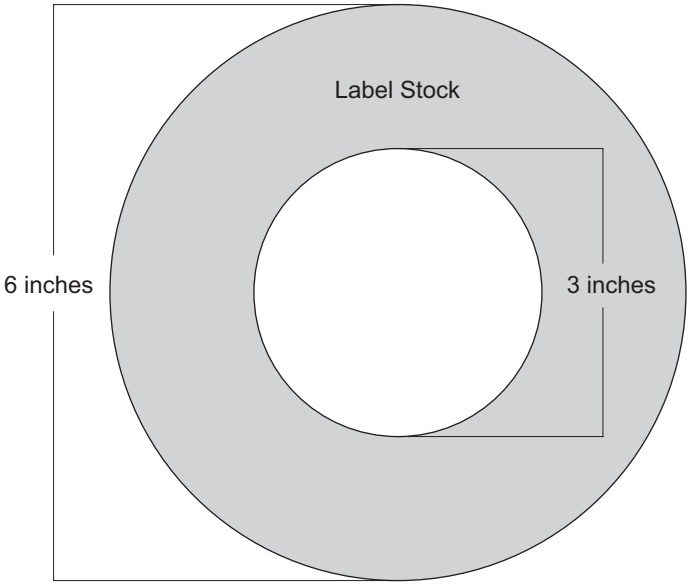
* The Reflective/Black Mark should be opaque to infared light. The mark should be between the labels. The end of the mark should correspond with the beginning of the label.

**There are two factors that determine whether the printer will accept any particular stock thickness.

1. The ability for the printer to pull the paper through the print area.
2. The ability for the sensor to read through the backing if the sensor is set to die cut.

If you are printing in continuous or reflective label sensing mode number 2 does not apply. The fact that the printer must read through the backing in die-cut mode will limit the thickness much more than the printers ability to pull the paper through the print area. However, if you adjust opacity level of the liner enough to allow the label to be seen by the stock sensor, the thickness will only be limited by the printers ability to pull it through the printer area. For these reasons the weight or thickness of the liner is a variable that can not easily be defined. Primera recommends and uses 40# liner with all label stock. **It is important to test all label stock with the intended printer before ordering large quantities!**

Roll Specifications



Section 6 : Technical Specifications

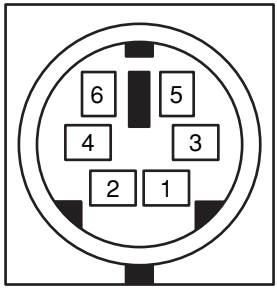
Print Method:	Inkjet
Print Resolutions:	4800 x 1200 dpi, 1200 x 1200 dpi, 600 x 600 dpi
Print Speeds:	Approximately 2" (51mm) per second for black Approximately 1.5" (38mm) per second for color + black Approximately 10" per second feed rate
Ink Cartridges:	#53376 Color (CMY) #53377 Black Dye-Based (Kd) #53020 Black Pigment-Based (Kp)
Colors:	16.7 million
Media Types:	Roll-fed pressure-sensitive labels, roll-fed tags
Media Sensing:	Moveable see-through sensor for die-cut labels and reflective for tags with black stripe sensing
Supply Roll:	6" (152mm) maximum diameter on 3" (76mm) core
Ink Level Warning:	Calculates actual number of prints remaining based upon ink usage of graphics being printed (patent-pending)
Indicator Lights:	Power, Pause, Ink
Controls:	Pause, Load/Feed, Unload
Operating Systems:	Windows XP/2000
Data Interface:	USB 1.1/2.0

Minimum System:	Pentium® IV computer or better, 512MB RAM, 5GB free hard drive space, USB 1.1/2.0 port
Label Design Software:	NiceLabel™ ME Primera Edition included. Can also be used with most other popular Windows-based label design software programs
Electrical Rating:	12VDC, 3.0A
Power Requirements:	100-240VAC, 50/60 Hz, 60 watts
Certifications:	UL, UL-C, CE, FCC Class B
Weight:	29 lbs. (13.2 Kg)
Dimensions:	17"W x 9.1'H x 15.5"D (432mmW x 231mmH x 394mmD)
Warranty:	One year, parts and labor

Section 7: Auxiliary Port Specifications

The 6-pin minicircular auxiliary interface is used for connecting the printer with auxiliary equipment such as a Auto Cutter.

Pin assignments are as follows:



Uses 5v logic @ 5mA - All signals are active low.

Pin Number	Signal Description
2	Cut signal - Output - Cut now.
3	Printer Busy - Output - Printer is Printing or moving the paper.
4	Cutter Position - Input - Cutter is in normal position (Ready). Low will keep printer from starting next print.
5	Remote Pause - Input - Will keep printer from starting next print.

NOTE: Cut signal output is enabled when "Present between every label", mode is active. Rewinder is set to "NO" in printer driver preferences.

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